### Implications of the Central Banks proposed LTI Multiple on Mortgage Holders Repayment Burden

### Introduction

I welcome the opportunity to comment on the Banks policy towards mortgage credit limits. Given the prevalence of homeownership in Ireland it is likely to be a contentious issue for many. However, left unchecked the role of credit within an economy can have devastating consequences for households, banks and the wider economy. Those with knowledge of the Irish banking system are all too aware of such folly.

Broadly speaking I am supportive of the aim of the Central Bank of Ireland. Breaking the vicious circle between credit and house prices should hopefully remove a key fragility of the banking system in Ireland. In my mind the two measures address the two keys risks stemming from the property sector- credit-risk and collateral risk. The financial crisis in Ireland has thrown up many scapegoats; unfortunately on more than one occasion I have heard borrowers complain that they were not aware of the terms and conditions or implications of taking out a mortgage. Informing the consumer can only go so far. For those bank customers who are not financially literate to understand what a mortgage entails it is necessary for policy to provide a safety net against possible adverse outcomes.

The dual measures relating to mortgage borrowing have received a lot of attention, in particular the loan-to-value ratio requirement of 15 per cent. I feel the focus on LTV's has detracted from a thorough examination of the second measure. The proposed loan-to-income (LTI) measure in its present guise is a very blunt instrument. A measure designed to guard against credit risk should be progressive, reflect the financial position of an applicant as well as encouraging banks to conduct their own credit risk assessment. The following analysis is designed to inform you in your formation of policy. The following highlight a number of issues which you may not have considered while also proposing alternative measures that might address the concerns raised.

Rather than addressing credit risk the proposed LTI measure could be seen to be discriminating against low income households by unduly reducing the amount of credit they can borrow. At the same time wealthier households face a potential scenario where debt burdens reach and exceed current levels and could potentially be unsustainable.

### **Basics of Mortgage Approval**

To better understand these issues, take the typical mortgage application process as it currently stands. When granting mortgages a credit provider assesses the ability of the mortgage holder to repay. Taking the prevailing mortgage rate, term and principle, the (monthly) repayment is compared to an applicant's (monthly) after tax income. A repayment cap of 30-40 per cent has typically been used by the industry. The proposed LTI multiple does not account for the tax wedge i.e., the difference between households gross income and net after tax disposable income. Disposable income is the appropriate measure as it reflects mortgage holder's available funds to meet repayments. Using the proposed multiple of 3.5 times gross income Chart 1 shows the repayment burden for the three relevant types of purchasers from a 2015 tax perspective (an individual applicant, a single income married couple and a two income married couple) at a prevailing mortgage rate of 4 per cent. In all cases the repayment burden increases with income.

low. As incomes increase so does the marginal tax rate – effectively at the higher rates for every extra three euro and fifty cent a household can borrow there is only 48 cent of untaxed income.



Chart 1: Repayment Cap Equivalent of LTI 3.5 LTI Multiple – mortgage rate of 4%

This would seem to contradict the very reason for implementing these measures. For example, a household earning just under €35,000, the average national wage in 2014 Q3, with a mortgage of 3.5 times gross income would have a repayment burden of over 25 per cent of their disposable income. Double the income and the individuals burden increases to almost 31 per cent. At higher income levels the burden increases proportionately eventually reaching repayment burdens close to and exceeding current levels.

Focusing on the lower income households it can be argued that the tilt in the repayment burden under the proposed scheme might offset fixed costs and the expenses associated with running a household but it is evident from reading the consultation document that in reaching the LTI multiple such analysis was not considered. However, this could easily be factored in by leveraging off the work of the Insolvency Services of Ireland who have estimated reasonable living costs for various household positions.

Chart 2 repeats the process for the higher mortgage rate of 7 per cent. In this scenario an individual borrowing 3.5 times their salary of €70,000 would have a repayment burden in excess of 43 per cent of available disposable income. In effect under the proposed regime an individual could borrow more when interest rates are at 7 per cent than what they can currently borrow from banks today – again counterintuitive.

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Chart 2: Repayment Cap Equivalent of LTI 3.5 LTI Multiple – Mortgage rate of 7%

# Alternative Measures to the simple LTI Multiple

There is scope to rebalance and reduce the inequality illustrated in Chart 1 and Chart 2 and to reduce credit risk while still ensuring conservative lending standards. A number of methods can be employed to achieve this goal.

# Targeted Repayment Cap

In dealing with this inequality and ensuring banks continue to assessing mortgage applications in a prudent manner targeting the repayment cap would seem to offer the easiest option. As already indicated it takes into account factors such as interest rate, taxation and income levels. It is the most succinct measure of all the factors affecting the mortgage application process. Chart 1 includes

<sup>&</sup>lt;sup>1</sup> For more on the ISI living expenses please see <u>http://www.isi.gov.ie/en/ISI/Pages/Explanitory\_tables</u>

a 30-40 per cent repayment cap while these are the industry range at present the Central Bank could introduce a more conservative measure.

A potential drawback identified in the consultation paper was the issue of using term extension to ease credit standards. Table 1 demonstrates the impact of such measures on representative households. Assume the Central Bank targets a 30 per cent repayment burden. For all buyer types a mortgage granted for a duration of 40 years at current rates (4 per cent) would exhibit a repayment burden equivalent to 38 per cent if it was calculated over a 25 year. If mortgage rates were to rise beyond the Central Banks estimate equilibrium mortgage rate to say 7 per cent, a 30 per cent repayment burden over 40 years would equate to 34 per cent over 25 years.<sup>2</sup> In summary, while there is some increase in repayment burden term extensions would not appear to make dramatic difference.

	te ana the impact	en repayment bar	aen	
	Buyer type			
			married 2	
Mortgage rate		married 1	incomes	
(%)	individual	income		
4	30%	30%	30%	
4	38%	38%	38%	
4	34%	34%	34%	
7	30%	30%	30%	
7	34%	34%	34%	
7	32%	32%	32%	
	Mortgage rate (%) 4 4 4 7 7 7 7	Mortgage rate (%) individual 4 30% 4 38% 4 34% 7 30% 7 30% 7 34% 7 32%	Mortgage rate married 1   (%) individual income   4 30% 30%   4 38% 38%   4 34% 34%   7 30% 30%   7 30% 30%   7 30% 30%   7 32% 32%	

# Table 1: Changes in Term and Mortgage Rate and the impact on repayment Burden

### Multiple LTI Buckets

An alternative approach would be to introduce a range of LTI caps. Table 2 outlines the equivalent LTI caps for incomes, personal status and interest rates. Again it highlights the difference between preand post-tax income measures. LTI caps ranging from 2.1 to 5.4 would be required in order to maintain a repayment cap of 31 per cent i.e., the repayment burden for an average income as outlined in Chart 1.

### Table 2: Implied LTI cap based on a 31 per cent repayment burden cap

			•	1 /			
		Individua	l	Married 1 income		Married 2 incomes	
Mortgage rate (%) Income (€)	4	7		4	7	4	7
10,000		5.4	3.9	5.4	3.9	5.4	3.9
20,000		4.9	3.5	5.1	3.6	5.4	3.9
30,000		4.5	3.2	4.8	3.4	5.3	3.8
34,928		4.3	3.1	4.6	3.3	5.2	3.8
40,000		4.1	3.0	4.5	3.2	4.9	3.5

<sup>2</sup> Equilibrium mortgage rate taken from: <u>http://www.centralbank.ie/publications/Documents/Part%203%20-</u>%20Assessing%20Interest%20Rate%20Risk%20from%20the%20Rates%20Constituent%20Components%20by% 20Frank%20Browne%20and%20Mary%20Everett.pdf

50,000	3.8	2.8	4.2	3.0	4.6	3.3
60,000	3.6	2.6	4.0	2.8	4.5	3.2
69,857	3.5	2.5	3.8	2.7	4.3	3.1
70,000	3.5	2.5	3.8	2.7	4.3	3.1
80,000	3.4	2.4	3.6	2.6	4.1	3.0
90,000	3.3	2.4	3.5	2.5	4.0	2.8
100,000	3.2	2.3	3.4	2.5	3.8	2.8
110,000	3.2	2.3	3.3	2.4	3.7	2.7
120,000	3.1	2.2	3.3	2.4	3.6	2.6
130,000	3.1	2.2	3.2	2.3	3.6	2.6
139,714	3.0	2.2	3.2	2.3	3.5	2.5
200,000	2.9	2.1	3.0	2.2	3.2	2.3

## Blended LTI

Three LTI caps per income point would clearly be a cumbersome approach to the issue. The final option outlined is a blended LTI which offers a compromise between the taxation-naive income multiple currently proposed and the all encompassing and equitable repayment burden approach. Reflecting the progressive nature of the income tax system in Ireland this section highlights the merits of a weighted average of two LTI's (a standard LTI and a marginal LTI). The standard LTI which could cover the first €35,000 could allow for a multiple of four times gross income. For gross incomes in excess of €35,000 households could borrow additional multiples at a marginal LTI rate of three times. A blended LTI would allow lower income households (with lower average tax rates) to borrow proportionality more money while at the same time limiting repayment burden at higher incomes. Chart 3 shows the repayment burden for such a measure. The lower marginal LTI reduces the debt burden of high income households by reducing the amount they can borrow against income taxed at the higher rate



Chart 3: Blended LTI and impact on Repayment Burden - €35K threshold (LTI 4 & 3.5)

The choice of  $\leq 35,000$  and the marginal LTI rate is arbitrary in this example but was picked to highlight the impact of households moving from the standard rate of tax to the higher rate of tax.<sup>3</sup> Should the Central Bank wish to target a repayment burden of 30 per cent to 40 per cent then a standard LTI of 5 times income up to  $\leq 35,000$  with a marginal LTI of 3 times income would provide a simple solution (

Chart 4).

Chart 4: Blended LTI and impact on Repayment Burden - €35K threshold (LTI 5& 2.5)

<sup>&</sup>lt;sup>3</sup> By coincidence €35,000 is also very close to the average wage in Ireland.



## Conclusion

From the basic calculations outlined above it is evident that the tilt effect of the current proposed measures could unduly penalise low income households while also leading higher income households to potentially take on higher risk than is currently allowed within the mortgage market. The issues stem from the tax wedge and the implications repayment burdens. A targeted repayment cap would overcome this issue as would multiple LTI buckets. In terms of the former, the language of the consultation paper may have been unduly critical. While term extension may increase the effective repayment burden the impact can easily be controlled by setting the appropriate repayment cap. In terms of the latter option while it would address the tax wedge issues it would be operationally cumbersome. Finally, a middle ground option is proposed whereby a blended LTI multiple could minimise the tax wedge without introducing excessive levels of extra work.

Thank you for considering my proposal

Gordon